

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for inspecting objects, the method comprising:
creating a reference image for a representative object, said reference image comprising an at least partially vectorized first representation of boundaries representing said representative object, said at least partially vectorized first representation of boundaries comprising connected reference vectors extending along said boundaries;
acquiring an image of an object under inspection comprising a second representation of boundaries representing said object under inspection; and
comparing a location of at least some boundaries in the second representation of boundaries to a location of corresponding boundaries in said at least partially vectorized first representation of boundaries, thereby to identify defects.
2. (previously presented) A method according to claim 1 wherein the comparing employs a user-selected variable threshold for acceptable distance between corresponding portions of the boundaries in the first and second representations.
3. (currently amended) A system for image processing comprising:
a boundary identifier operative to generate a representation of boundaries of known elements in an image, said representation of boundaries comprising connected reference vectors extending along said boundaries;
a hardware candidate defect identifier operative to identify at least some candidate defects in the image, in hardware; and
a software candidate defect inspector receiving an output from the hardware candidate defect identifier and analyzing a location of boundaries in said representation of boundaries to identify at least one false alarm within said output, in software.

4. (original) A system according to claim 3 wherein the boundary identifier comprises a hardware boundary identifier operative to generate a representation of boundaries of known elements in the image, in hardware.

5. (original) A system according to claim 3 and also comprising a software candidate defect identifier operative to identify additional candidate defects in the image, in software.

6. (original) A system according to claim 5 wherein the software candidate defect inspector also receives a second output from the software candidate defect identifier and uses the representation of boundaries to identify at least one false alarm within said second output, in software.

7. (original) A system according to claim 3 wherein said hardware candidate defect identifier employs said representation of boundaries in order to identify at least some candidate defects.

8. (original) A system according to claim 5 wherein said software candidate defect identifier employs said representation of boundaries in order to identify at least some candidate defects.

9. – 33. (Canceled)

34. (Previously Presented) A system for image processing comprising:
a boundary identifier operative to generate a representation of boundaries of known elements in an image;
a hardware candidate defect identifier operative to identify at least some candidate defects in the image, in hardware;
software candidate defect identifier operative to identify at least some candidate defects in the image, in software; and

a software candidate defect inspector receiving an output at least from the hardware candidate defect identifier and analyzing a location of boundaries in said representation of boundaries to identify at least one false alarm within said output, in software.

35. (Previously Presented) A system according to claim 34 wherein the boundary identifier comprises a hardware boundary identifier operative to generate a representation of boundaries of known elements in the image, in hardware.

36. (Previously Presented) A system according to claim 34 wherein the software candidate defect inspector also receives a second output from the software candidate defect identifier and uses the representation of boundaries to identify at least one false alarm within said second output, in software.

37. (Previously Presented) A system according to claim 34 wherein said hardware candidate defect identifier employs said representation of boundaries in order to identify at least some candidate defects.

38. (Previously Presented) A system according to claim 34 wherein said software candidate defect identifier employs said representation of boundaries in order to identify at least some candidate defects.